

JUN 21 2001

TECH CENTER 1600/2900 1646

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/745,008

DATE: 05/15/2001

TIME: 11:34:25

Input Set : A:\1322.1028-001.TXT

Output Set: N:\CRF3\05152001\I745008.raw

ENTERED

4 <110> APPLICANT: Chuenkova, Marina
5 Pereira, Miercio A.
7 <120> TITLE OF INVENTION: T. Cruzei-Derived Neurotrophic Agents and
8 Methods of Use Therefor
11 <130> FILE REFERENCE: 1322.1028-001
13 <140> CURRENT APPLICATION NUMBER: US 09/745,008
14 <141> CURRENT FILING DATE: 2000-12-20
16 <150> PRIOR APPLICATION NUMBER: US 60/172,881
17 <151> PRIOR FILING DATE: 1999-12-20
19 <160> NUMBER OF SEQ ID NOS: 34
21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 2133
25 <212> TYPE: DNA
26 <213> ORGANISM: Trypanosoma cruzi
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30 tgacaccatt gtttttaggca taatagaagt tctacaaaca acgcccgaag gacacacagg 120
31 caggcaccga ctaccatggg gaaaacagtc gttgtggcca gtaggatgtt ctggctaagt 180
32 tttttcgtgc cgcttcttct tgcgatctgc cccagcgagc ccgcgtacgc cttggcacc 240
33 ggatcgagcc gagttgagct gtttaagcgt aagaattcga cgggtgccgtt tgaagacaag 300
34 gccggcaaaag tcaccgagcg ggttgtccac tcgttccgcc tccccgccct tgtaaatgtg 360
35 gacgggggtga tggttgccat cgcggacgct cgctacgaca catccaatga caactccctc 420
36 attgatacgg tggcgaagta cagcgtggac gatggggaga cgtgggagac ccaaattgcc 480
37 atcaagaaca gccgtgtatc gtctgtttct cgtgtgggtg atcccaccgt gattgtgaag 540
38 ggcaacaagc tttaacgtcct ggttggaagc tactatagtt cgagaagcta ctggtcgtcg 600
39 catggtgatg cgagagactg ggatattctg cttgccgttg gtgaggtcac gaagtccact 660
40 gcgggcggca agataactgc gagtatcaaa tgggggagcc ccgtgtcact gaagaagttt 720
41 tttccggcag aatggaagg catgcacaca aatcaatttc ttggcggcgc ggggtgttgc 780
42 attgtagcgt ccaacgggaa tcttgtgtac cctgtgcagg ttacgaacaa aaagaagcaa 840
43 gttttctcca agatcttcta ctcggaagat gatggcaaga cgtggaagtt tgggaagggt 900
44 aggagcgatt ttggctgctc tgaacctgtg gcccttgagt gggaggggaa gctcatcata 960
45 aacacccgag ttgactggaa acgccgtctg gtgtacgagt ccagtacat ggagaaaccg 1020
46 tgggtggagg ctgtcggaac cgtctcgcgt gtgtggggcc cctcaccaaa atcgaaccag 1080
47 cccggcagtc agagcagctt cactgccgtg accatcgaag gaatgcgtgt gatgctcttc 1140
48 acacaccgcg tgaatttttaa gggaagggtg ctgcgcgacc gactgaacct ctggctgacg 1200
49 gataaccagc gcatttataa cgttgggcaa gtatccattg gtgatgaaaa ttccgcctac 1260
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51 gtgtacagcc ttgtttttgc acgcctggtt ggcgagctac ggatcattaa atcagtgtctg 1380
52 cggctcctgga agaattggga cagccacctg tccagcattt gcaccctgc tgatccagcc 1440
53 gcttcgtcgt cagagagtgg ttgtgggtccc gctgtcacca cggttggtct tgttggtctt 1500
54 ttgtccggca acgcctccca aaacgtatgg gaggatgcgt accgctgcgt caacgcaagc 1560
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56 ctttgccggg tgagccagca ggggcagaat cagcggatc gttttgcaaa ccacgcgttc 1680
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58 gcgagcctgg actcttctgg cggcaaaaaa ctctggggc tctcgtacga cgagaagcac 1800
59 cagtggcagc caatatacgg atcaacgccg gtgacgccga cgggatcgtg ggagacgggt 1860

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60 aaaaggtacc acttggttct tacgatggcg aataaaattg gctccgtgta cattgatgga 1920
61 gaacttctgg agggttcagg acagaccgtt gtgccagacg ggaggacgcc tgacatctcc 1980
62 cacttctacg ttggcgggta taaaaggagt gatatgccaa ccataagcca cgtgacgggtg 2040
63 aataatgttc ttctttacaa ccgacagctg aataccgagg agatcaggac cttgttcttg 2100
64 agccaggacc ttattggcac ggaagcacac atg 2133
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67 <211> LENGTH: 666
68 <212> TYPE: PRT
69 <213> ORGANISM: Trypanosoma cruzi
71 <400> SEQUENCE: 2
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73 1 5 10 15
74 Phe Val Pro Leu Leu Leu Ala Ile Cys Pro Ser Glu Pro Ala Tyr Ala
75 20 25 30
76 Leu Ala Pro Gly Ser Ser Arg Val Glu Leu Phe Lys Arg Lys Asn Ser
77 35 40 45
78 Thr Val Pro Phe Glu Asp Lys Ala Gly Lys Val Thr Glu Arg Val Val
79 50 55 60
80 His Ser Phe Arg Leu Pro Ala Leu Val Asn Val Asp Gly Val Met Val
81 65 70 75 80
82 Ala Ile Ala Asp Ala Arg Tyr Asp Thr Ser Asn Asp Asn Ser Leu Ile
83 85 90 95
84 Asp Thr Val Ala Lys Tyr Ser Val Asp Asp Gly Glu Thr Trp Glu Thr
85 100 105 110
86 Gln Ile Ala Ile Lys Asn Ser Arg Val Ser Ser Val Ser Arg Val Val
87 115 120 125
88 Asp Pro Thr Val Ile Val Lys Gly Asn Lys Leu Tyr Val Leu Val Gly
89 130 135 140
90 Ser Tyr Tyr Ser Ser Arg Ser Tyr Trp Ser Ser His Gly Asp Ala Arg
91 145 150 155 160
92 Asp Trp Asp Ile Leu Leu Ala Val Gly Glu Val Thr Lys Ser Thr Ala
93 165 170 175
94 Gly Gly Lys Ile Thr Ala Ser Ile Lys Trp Gly Ser Pro Val Ser Leu
95 180 185 190
96 Lys Lys Phe Phe Pro Ala Glu Met Glu Gly Met His Thr Asn Gln Phe
97 195 200 205
98 Leu Gly Gly Ala Gly Val Ala Ile Val Ala Ser Asn Gly Asn Leu Val
99 210 215 220
100 Tyr Pro Val Gln Val Thr Asn Lys Lys Lys Gln Val Phe Ser Lys Ile
101 225 230 235 240
102 Phe Tyr Ser Glu Asp Asp Gly Lys Thr Trp Lys Phe Gly Lys Gly Arg
103 245 250 255
104 Ser Asp Phe Gly Cys Ser Glu Pro Val Ala Leu Glu Trp Glu Gly Lys
105 260 265 270
106 Leu Ile Ile Asn Thr Arg Val Asp Trp Lys Arg Arg Leu Val Tyr Glu
107 275 280 285
108 Ser Ser Asp Met Glu Lys Pro Trp Val Glu Ala Val Gly Thr Val Ser
109 290 295 300
110 Arg Val Trp Gly Pro Ser Pro Lys Ser Asn Gln Pro Gly Ser Gln Ser

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111 305          310          315          320
112 Ser Phe Thr Ala Val Thr Ile Glu Gly Met Arg Val Met Leu Phe Thr
113          325          330          335
114 His Pro Leu Asn Phe Lys Gly Arg Trp Leu Arg Asp Arg Leu Asn Leu
115          340          345          350
116 Trp Leu Thr Asp Asn Gln Arg Ile Tyr Asn Val Gly Gln Val Ser Ile
117          355          360          365
118 Gly Asp Glu Asn Ser Ala Tyr Ser Ser Val Leu Tyr Lys Asp Asp Lys
119          370          375          380
120 Leu Tyr Cys Leu His Glu Ile Asn Thr Asp Glu Val Tyr Ser Leu Val
121 385          390          395          400
122 Phe Ala Arg Leu Val Gly Glu Leu Arg Ile Ile Lys Ser Val Leu Arg
123          405          410          415
124 Ser Trp Lys Asn Trp Asp Ser His Leu Ser Ser Ile Cys Thr Pro Ala
125          420          425          430
126 Asp Pro Ala Ala Ser Ser Ser Glu Ser Gly Cys Gly Pro Ala Val Thr
127          435          440          445
128 Thr Val Gly Leu Val Gly Phe Leu Ser Gly Asn Ala Ser Gln Asn Val
129          450          455          460
130 Trp Glu Asp Ala Tyr Arg Cys Val Asn Ala Ser Thr Ala Asn Ala Glu
131 465          470          475          480
132 Arg Val Arg Asn Gly Leu Lys Phe Ala Gly Val Gly Gly Gly Ala Leu
133          485          490          495
134 Trp Pro Val Ser Gln Gln Gly Gln Asn Gln Arg Tyr Arg Phe Ala Asn
135          500          505          510
136 His Ala Phe Thr Leu Val Ala Ser Val Thr Ile His Glu Ala Pro Arg
137          515          520          525
138 Ala Ala Ser Pro Leu Leu Gly Ala Ser Leu Asp Ser Ser Gly Gly Lys
139          530          535          540
140 Lys Leu Leu Gly Leu Ser Tyr Asp Glu Lys His Gln Trp Gln Pro Ile
141 545          550          555          560
142 Tyr Gly Ser Thr Pro Val Thr Pro Thr Gly Ser Trp Glu Thr Gly Lys
143          565          570          575
144 Arg Tyr His Leu Val Leu Thr Met Ala Asn Lys Ile Gly Ser Val Tyr
145          580          585          590
146 Ile Asp Gly Glu Leu Leu Glu Gly Ser Gly Gln Thr Val Val Pro Asp
147          595          600          605
148 Gly Arg Thr Pro Asp Ile Ser His Phe Tyr Val Gly Gly Tyr Lys Arg
149          610          615          620
150 Ser Asp Met Pro Thr Ile Ser His Val Thr Val Asn Asn Val Leu Leu
151 625          630          635          640
152 Tyr Asn Arg Gln Leu Asn Thr Glu Glu Ile Arg Thr Leu Phe Leu Ser
153          645          650          655
154 Gln Asp Leu Ile Gly Thr Glu Ala His Met
155          660          665
158 <210> SEQ ID NO: 3
159 <211> LENGTH: 34
160 <212> TYPE: DNA
161 <213> ORGANISM: Artificial Sequence

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163 <220> FEATURE:
164 <223> OTHER INFORMATION: Synthetic primer
166 <400> SEQUENCE: 3
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169 <210> SEQ ID NO: 4
170 <211> LENGTH: 32
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Synthetic primer
177 <400> SEQUENCE: 4
178 ccgctcgagg ctcaagaaca aggtcctgat cg          32
180 <210> SEQ ID NO: 5
181 <211> LENGTH: 29
182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Synthetic primer
188 <400> SEQUENCE: 5
189 ggggaattcgg ttgccaatcg cggacgctc          29
191 <210> SEQ ID NO: 6
192 <211> LENGTH: 26
193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Synthetic primer
199 <400> SEQUENCE: 6
200 cccctcgaga tttgccgtgc ttgcgt          26
202 <210> SEQ ID NO: 7
203 <211> LENGTH: 31
204 <212> TYPE: DNA
205 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Synthetic primer
210 <400> SEQUENCE: 7
211 cccctcgagc cgacaaaaag ccaacaaaga c          31
213 <210> SEQ ID NO: 8
214 <211> LENGTH: 25
215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
218 <220> FEATURE:
219 <223> OTHER INFORMATION: Synthetic primer
221 <400> SEQUENCE: 8
222 agatgaagac tccgcgcccc tgagg          25
224 <210> SEQ ID NO: 9
225 <211> LENGTH: 23
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:

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230 <223> OTHER INFORMATION: Synthetic primer
 232 <400> SEQUENCE: 9
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 235 <210> SEQ ID NO: 10
 236 <211> LENGTH: 24
 237 <212> TYPE: DNA
 238 <213> ORGANISM: Artificial Sequence
 240 <220> FEATURE:
 241 <223> OTHER INFORMATION: Synthetic primer
 243 <400> SEQUENCE: 10
 244 cggagtcaac ggatttggtc gtat 24
 246 <210> SEQ ID NO: 11
 247 <211> LENGTH: 24
 248 <212> TYPE: DNA
 249 <213> ORGANISM: Artificial Sequence
 251 <220> FEATURE:
 252 <223> OTHER INFORMATION: Synthetic primer
 254 <400> SEQUENCE: 11
 255 agccttctcc atggtggtga agac 24
 257 <210> SEQ ID NO: 12
 258 <211> LENGTH: 45
 259 <212> TYPE: PRT
 260 <213> ORGANISM: Artificial Sequence
 262 <220> FEATURE:
 263 <223> OTHER INFORMATION: Synthetic peptide
 265 <400> SEQUENCE: 12
 266 Gln Pro Leu Arg Arg Gln Arg Val Val Val Val Pro Leu Ser Pro Arg
 267 1 5 10 15
 268 Leu Val Leu Leu Ala Phe Cys Arg Gln Arg Leu Pro Leu Lys Arg Met
 269 20 25 30
 270 Gly Gly Ser Tyr Arg Cys Val Asn Ala Ser Thr Ala Asn
 271 35 40 45
 274 <210> SEQ ID NO: 13
 275 <211> LENGTH: 21
 276 <212> TYPE: PRT
 277 <213> ORGANISM: Artificial Sequence
 279 <220> FEATURE:
 280 <223> OTHER INFORMATION: Synthetic peptide
 282 <400> SEQUENCE: 13
 283 Arg Gln Arg Leu Pro Lys Arg Met Gly Gly Ser Tyr Arg Cys Val Asn
 284 1 5 10 15
 285 Ala Ser Thr Ala His
 286 20
 289 <210> SEQ ID NO: 14
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 291 <212> TYPE: PRT
 292 <213> ORGANISM: Artificial Sequence
 294 <220> FEATURE:
 295 <223> OTHER INFORMATION: Synthetic peptide

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/745,008

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Input Set : A:\1322.1028-001.TXT

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